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ABSTRACT

A study investigated the book handling and print concepts knowledge of 37 preschool children in a college day-care center. Subjects ranged in age from 2 to 5 years. As part of their normal day, the subjects were taken aside and a story was read to them. They were then asked questions about the physical make-up of the book, rules and concepts of print, parts of a story, and comprehension. The 5-year-olds were able to complete all the tasks, with the means for the other three groups moving progressively lower with age. Although there appeared to be a developmental trend, there was considerable variation within age groups. Some 3- and 4-year-olds knew a great deal about books, print, and reading, while many needed more experiences with books. The results suggest that preschools need to encourage this prerequisite knowledge for beginning reading by providing colorful and inviting picture books, a comfortable area for reading, and frequent periods in which the children are read to. (HTH)

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What Do Preschoolers Know about Print in Books?

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Abstract

This is a report of a study of the book handling and print concepts knowledge of 37 preschoolers in a college day-care center. Children were engaged in informal assessment procedures suggested by Goodman and Altwerger (1981) as an interactor read to them from a picture story book. The tasks yielded information on: (1) book handling; (2) directional rules; (3) concepts about print; (4) knowledge of story parts; (5) comprehension.

Although a developmental trend was noted for the age groups (twos, threes, fours, and fives), great variability existed within each age group. Recommendations for preschool activities such as reading to children, the shared-book experience, the Language Experience Approach, and encouraging retelling of stories are offered.

What Do Preschoolers Know about Print in Books?

Teachers, parents, and most adults usually take for granted that young children know what they mean when they talk about familiar linguistic terms such as "a word," "a letter," "the beginning of the story," "the title," "the next page." Actually, research done in Scotland by Reid (1966), in England and Canada by Downing (1966, 1969, 1970, 1971-72, 1977, 1979), in New Zealand by Clay (1972), and in the United States by Day and Day (1978), Carswell (1979), John (1980), and Goodman and Altwerger (1981) indicate that preschoolers and many kindergarten and first-grade students do not possess these concepts about print and do not really understand the nature of the reading task.

Vernon (1957) found that most young children are effectively in a state of "cognitive confusion" about these reading-related terms. Downing (1971-72) agreed with Vernon and has proposed the "cognitive clarity theory of reading" which considers learning to read as a problem solving task dependent on cognitive rather than perceptual development. His many studies have led him to conclude that children's degree of understanding about the nature of reading, the symbolic function and communicative purpose of written language, and the meaning of technical print terms is the best predictor of readiness for beginning reading.

Clay (1972), who was concerned about the early detection of reading difficulties, agrees with Downing and has developed a test that yields information about young children's concepts about print. As the teacher reads the picture book called Sand to the children, s/he asks questions like: "Show me the front of the book;" "Where do I begin to read?" "Show me just one word;" "Show me one letter." The 24 items of the Concepts about Print Test (Sand)

yield a composite score, and Clay developed norms by administering it to 320 urban children in New Zealand. She stressed that its real value was as a survey to uncover what processes a particular child controls and what s/he needs to be taught next.

Studies Using Clay's Procedures

Early childhood educators in the U.S. looked upon Clay's test with interest but questioned whether or not it was suitable for American children. Day and Day (1978) used the test with 56 American kindergarteners at three points through their school year, following this with another administration at the beginning of first grade. They reported high test-retest and split-half reliability coefficients and concluded that the similarities between their results and those Clay reported for her New Zealand sample supported the use of Sand with Amercian children.

Johns (1980) used Sand with 60 first-graders who were divided into above-average, average, and below-average groups by reading ability. Above-average readers' concepts about print were significantly higher than those for average and below-average readers. His findings tend to support the "cognitive clarity" theory. However since the high group seemed to have these concepts, he raised the question that a child's understanding of the concepts about print might be a cause or a consequence of reading achievement. He said:

> "The applications of the findings of this study to classrooms should therefore be approached cautiously; nevertheless, teachers may wish to ensure that students are taught the major concepts about print and the language of instruction that are related to reading" (p. 547).

Studies at William Paterson College

Several graduate students at William Paterson College used Sand in various settings. While small samples preclude generalizability, their results are interesting and generally support the current literature.

Fryczynski (1981) correlated scores on Sand with scores on a Preschool Experience Survey which she developed. The survey was a typical "what does your child do at home" instrument filled out by parents. Nine of the items were related to informal reading and writing activities involving concepts about print. For the four-year-olds in her sample, she found a moderately positive correlation between the home print experiences and scores on Sand.

Reeves (1982) replicated the Johns' (1981) study with a sample of first-graders in a northern New Jersey suburban school. A significant F-ratio (10.67 p .003) indicated that the traditional three reading groups differed on the Sand in the expected direction. She also found a high positive correlation (.72) between the scores on the Gates-Mac Ginitic Reading Test and Sand. Again, do children do better on Sand because they can read, or did they learn to read because they possessed more concepts about print?

Another Informal Assessment Approach

In a review of Clay's Concepts About Print Test, Goodman (1981) describes it as a fine observational tool that is used in a naturalistic setting, a real reading-to experience. Accordingly, it can provide useful information about how a child interacts with a book.

On the negative side, Goodman notes that the Sand booklet might not have cultural relevance for all children since it depicts a blond boy playing on a beach. Also, some items show words or letters reversed, and the child is asked what's wrong. A child reading for meaning might not even notice these reversals.

Goodman and Altwerger (1981) have proposed an adaptation of Clay's instrument. Described in Appendix D of their work is a procedure called a "Book Handling Task." They suggest selecting a picture storybook suitable for preschoolers. The book should have a title page containing the title and author's name and pages with clear, bold print accompanied by related pictures. The teacher or interactor should read the book to the child and ask questions similar to those in Clay's test.

A Study of Preschoolers Knowledge about Print in Books

Intrigued by the simplicity of Goodman and Alwerger's Book Handling Task and its relative ease of administration, a graduate student who worked in the college day care center and I decided to use the protocols with the preschoolers at the center to see just how much they knew about print in books. Lischick (1982) was looking for a developmental pattern to emerge. Also she was interested in implications for the day care curriculum.

Subjects

The subjects for this study were 37 children who were enrolled in the day-care center at William Paterson College as their parents attended college classes. They ranged in age from 2 years 8 months to 5 years 2 months. A variety of racial and ethnic backgrounds were represented -- Arabic, Americans, Asian, Black, Hispanic and Turkish. All spoke English and four were bilingual. Most of the children came from middle-to lower-middle-class homes in which two parents were present.

The college is suburban to New York City and draws students largely from Bergen and Passaic Counties. During their sessions, the children engage in typical preschool activities such as identification of names, letters, numbers, and shapes. They listen to stories, paint pictures, and play games in a semi-structured setting.

Procedures

As a part of their normal day, the children were taken aside and involved in the Book Handling Knowledge Task with a book entitled My Cat Pearl by Dona Turner (1980). This book met all the criteria spelled out by Goodman and Altwerger (1981). All sessions were taped to permit scoring at a later time. The children did not know they were being tested. As far as they were concerned, they were being read to on an individual basis.

To make reporting and discussing simpler, the tasks were grouped into the five following clusters: (1) Book Handling -- distinguishing the front from the back, top from bottom and recognizing the purposes of a book, where to start, what a page is; (2) Awareness of Directional Rules of Print -- recognizing left-to-right, top-to-bottom progression, matching spoken words to print, awareness of print tracking a message; (3) Concepts of Print -- picking out words and letters, beginning and ending letters, capital letters; (4) Parts of a Story -- picking out the title, the beginning and ending of the story; (5) Comprehension -- retelling the main events in the story.

Results and Discussion

Mean scores for the age groups represented were calculated and presented in table form to allow for inspection of developmental trends (Table 1). The results will be discussed quantitatively and qualitatively.

Book Handling. As seen in Table 1, all the fives could do all tasks with the means for the other three groups moving in a predictable direction, from 4.7 for the twos to 7.0 for the fours.

All children but one knew that a book is to be read. As for "What's inside it?" the twos either didn't respond or referred to the cat on the cover. Ten three-year-olds and nine four-year-olds answered "pictures," while the others said "letters," "words," "stories," and "numbers." Some

Table 1

Means on the Book Knowledge Task*
N = 37

Cluster	Possible Score	Age Groups 2 N = 3 $\bar{X}$	2 N = 3 SD	3 N = 14 $\bar{X}$	3 N = 14 SD	4 N = 15 $\bar{X}$	4 N = 15 SD	5 N = 5 $\bar{X}$	5 N = 5 SD
BookHandling (item 1-8)	8	4.7	1.1	6.2	2.0	7.0	1.2	8.0	.0
Directional Rules (items 9-14)	7	0.0	0.0	2.3	2.4	3.9	3.1	6.0	2.2
Concepts about Print (items 15-18)	7	.7	1.2	3.7	2.5	4.4	2.[illegible]	5.2	1.4
Story Parts (items 19,21)	3	.3	.5	1.0	.78	1.5	1.2	2.0	.71
Comprehension (Retelling of main events)	6	1.3	1.2	1.0	.78	1.7	1.6	2.8	1.3
	31	7.0	3.6	14.4	6.8	18.5	8.2	24.0	2.5

* Goodman, Y. and Altwerger, B. "Print Awareness in Pre-School Children: A Working Paper. Appendix D. Arizona Center for Research and Development, University of Arizona, 1981.

fours said "papers" and "pages," and one gave the unique response "Reads." It has reads inside." While the threes reported print-related terms about 30% of the time, the fours did so more than half the time. These responses were similar to those reported by Goodman and Altwerger (1981, p. 24).

Only nine children were unable to distinguish the back from the front of the book, and only seven of the 37 could not point out the top and bottom of a page. All but three knew what a page was.

When asked "Read this to me," no twos responded while all the others except one who could read fluently indicated they didn't know how to read. One three-year-old showed a knowledge of some of the functions of print when she answered, "I can't read, but you read when you get up and read when you cook." Several said that although they couldn't read, their dads or moms or sisters read to them.

Directional Rules of Print. While none of the twos could perform these tasks, most of the fives could ($\bar{X} = 6.0$). In fact, 12 fours and fives achieved perfect scores for this area.

When asked about where to begin reading, the less mature (all the two's, nine three-year-olds, six four-year-olds) attended to the pictures with some making up stories as did the children in the Goodman and Altwerger study. On the other hand, four three-year-olds and eight four-year-olds responded like the fives and went right to the print.

When the book was presented upside down, most said it couldn't be read that way. While the twos, two threes, and one four did not respond at all, three four-year-olds did not even notice the inverted order. There appear to be great individual differences within the age group.

Concepts about Print. The tasks in this cluster are designed to tap children's knowledge of print terminology -- letters, words, first and last letters, and capital letters. Although the means go up with age (Table 1), great variability was noted. Except for the twos, some children at all the other age levels exhibited some knowledge about print. But for many there was general confusion over what constituted a letter and a word, with 17 not able to pick out a word. Supporting the findings of Downing and Oliver (1973), some thought that each letter was a word.

Although six four-year-olds and all the fives but one scored 5 or more out of a possible 7, one five-year-old who also did poorly on the directionality cluster scored only 3 on these tasks.

Parts of a Story. Only seven children from the sample were able to point out the title and show the beginning and end of the story while twelve were not able to score at all on these tasks. Since none seemed to understand the term "author," the item was not included in the tally.

Generally, the fours and fives were more successful in this area, and the means reflect a developmental trend (Table 1).

Comprehension. Comprehension was assessed by having the children retell as much of the story as they could remember. To respond adequately, the child had to speak rather than nod, point, or give a one-word answer. Each event or appropraite statement given by each child was listed. The highest score recorded was six, and this was achieved not by a five but by a four-year-old. Eight children were unable to respond at all.

The fours and fives were more able to retell this simple story, but generally, as seen by the means in Table 1, the children did not perform well on this task. The children in the Goodman and Altwerger (1981, p. 26) study seemed to do better at retelling.

Implications

The results of this study of preschoolers' book handling and print concepts knowledge indicate that although there appears to be a developmental trend, there is considerable variation within age groups. The total means (Table 1) for the groups, aged two through five, were: 7.0, 14.4, 18.5, and 24.0. The high standard deviations for the middle two groups (threes and fours) indicate the great variability within these age groups. Some threes and fours know a great deal about books, print, and reading while many need many more experiences with books. It is to this middle group that this study was mainly directed since few two-year-olds and five-year-olds attend preschool, the twos being too young and the fives in kindergarten.

Books and Reading to Children

To encourage this prerequisite knowledge for beginning reading, preschools should have many durable, colorful, inviting picture books available for children to handle and browse through on their own. A library or book corner containing mats, pillows, or comfortable chairs and tables and attractively displayed books should be a focal point in the environment.

Children should be read to every day. Small groups or individuals should sit very near the reader so that the children can see the parts of the book and the print as it is being read. Readers should consciously use book and print terminology as they go. For example, "This is the front of the book, and here is the title page (reads title) What do you think the story will be about?" "The story starts here (points to print)."

The one five-year-old in this study, who did very poorly on the directional rules and print concepts, appeared to learn from the session with the interactor. At first he pointed to the pictures when asked about where the story began.

As the interactor read My Cat Pearl, she ran her fingers under the print. He asked for a second reading and this time he tracked the print, turned the pages, and tried to "keep the place." This same youngster was very vocal and recalled a great deal of the story after the first reading.

In an interview with the child's parent, it was learned that both parents worked and went to school part-time. They never had time to read to their son, and they didn't have books for him at home. He spent a great deal of time watching television at home and in a neighbor's apartment. Very ready and almost anxious to engage in this activity, he learned a great deal about print in just the one data collection session.

Shared-Book Experience

Another activity that preschools could provide is the shared-book experience. Popular in New Zealand, Holdaway (1979) describes this as a teacher reading to a group of children from a "big book." The "big books" are good picture storybooks with very predictable text. They may be purchased commercially, or teachers may print the text from a book on large chart paper, fastening the pages together with brads. The book is placed on an easel, and the teacher points to the print as it is being read. Children can draw pictures to illustrate the story, or the teacher can project the book's picture by means of an overhead or opaque projector.

Slaughter (1983) points out that through the shared-book experience, children can learn directionality (left-to-right; top-to-bottom), what words and letters are, and how to begin to predict what's coming. To promote prediction, she suggests that the teacher read the same "big book" several times, stopping before the ends of some sentences so that the children are encouraged to slot in some words. She calls this a kind of beginning cloze

procedure. To summarize, she says, "The shared-book experience seems to meet many of the developing needs of children during the prereading stage as they learn about letters, words, and books and develop reading-like behaviors" (p. 761).

Language Experience Approach

The Language Experience Appraoch (LEA) as described by Stauffer (1980) and Hall (1982) could be used profitably in the preschool. The teacher can write on a chart paper one sentence "stories" about the weather or about some event after a discussion period. The children then see the words they have just used being written down and read back to them. Again this teaches directionality and print connections in a meaningful context.

Retelling

Another finding of this study was that few children could retell much of the story after having it read to them. Even the fives did poorly. (See Table 1, Comprehension). Children need experience in talking about stories that have been read to them. Dramatic play, in which they act out the story, and just recounting the events as they happened can promote retention of ideas and develop oracy as well.

Conclusions

All of the above activities -- reading to children individually, the shared-book experience, writing down and reading back (LEA), and encouraging talking about stories -- are suggested for the preschool years to prepare children conceptually for the reading task. Mason (1983) has proposed a theory that experience with print more than maturation may play an important part in beginning reading success. These activities are just such experiences, related to the three reading contexts described by Mason:

> We propose that to learn to read, children must obtain experience with three reading contexts: the use of print and its relationship to oral language (function of print), the rules for relating print to speech sounds (form of print), and the procedures for engaging in the act of reading and for discussing with other what one has read (convention of print and procedure for instruction) p. 9.

Rather than teaching letters and sounds in isolated drills, teachers in day-care centers and nursery schools and parents at home can teach children about reading and print and prepare them to learn to read by exposing them to these "real reading" experiences.

References

Carswell, M.D. Attainment of selected concepts related to reading by kindergarten and first grade children. University of Georgia, 1979. (ERIC Document Reproduction Service No. ED 177 481)

Clay, M.M. The early detection of reading difficulties: A diagnostic survey with a test booklet Sand. Auckland, New Zealand: Heinemann Educational Books, 1972a.

Day K.C., & Day, H.D. Observations of kindergarten and first grade children's development of oral language, concepts about print, and reading readiness. Texas Woman's University, 1978a. (ERIC Document Reproduction Service No. ED 176 213)

Downing, J. Reading readiness re-examined. In J. Downing (Ed.), The First International Reading Symposium, Oxford 1964. New York: The John Day Co. 1966.

Downing, J. How children think about reading. The Reading Teacher, December 1969, 23 (3), 217-230.

Downing, J. Children's concepts of language in learning to read. Educational Research, February 1970, 12, 106-112.

Downing, J. Children's developing concept of spoken and written language. Journal of Reading Behavior, 1971-72, 4(1), 1-19.

Downing, J. Learning to read with understanding. Paper presented at the Annual Convention of the International Reading Association, May 1977.

Downing, J. Reading and reasoning. New York: Springer-Verlag, 1979

Downing J., & Oliver, P. The child's conception of 'a word'. Reading Research Quarterly, 1973-74, 9(4), 468-482.

Fryczynski, V. The relationship between concepts about print and home reading environment. Unpublished graduate project, William Paterson College, Wayne, N.J., 1981.

Goodman, Y.M. Test review: Concepts About Print Test. The Reading Teacher, January 1981, 34(4), 445-448.

Goodman, Y.M., & Altwerger, B. Print awareness in preschool children: A working paper. A study of the development of literacy in preschool children. Tuscon, Arizona: University of Arizona, September, 1981.

Hall, M. Teaching reading as a language experience. Columbus, Ohio: Merrill Publishing Co., 1981.

Holdaway, D. Foundations of literacy. Auckland, New Zealand: Heinemann Educational Books, 1979.

Johns, J.L. First graders' concepts about print. Reading Research Quarterly, 1980, 15(4), 529-549.

Lischick, C. Stages of print awareness observed from the performance of preschool children on book handling tasks. Unpublished graduate project, William Paterson College, Wayne, N.J., 1982.

Mason, J. Acquisition of knowledge about reading: the preschool period. Technical Report no. 267, Center for the Study of Reading, University of Illinois at Urbana-Champaign, December 1982.

Reeves, N. The relationship between knowledge of concepts about print and reading achievement. Unpublished graduate project, William Paterson College, Wayne, N.J., 1982.

Reid, J.F. Learning to think about reading. Educational Research, 1966, 9, 56-62.

Slaughter, J.P. Big books for little kids: Another fad or a new approach for teaching beginning reading? The Reading Teacher, April 1983, 36(8), 758-762.

Stauffer, R. The language experience approach to the teaching of reading. New York: Harper and Row, 1980.

Turner, D. My Cat Pearl. New York: T.Y. Crowell, 1980.

Vernon, M.D. Backwardness in reading: A study of its nature and origin. Cambridge, England: Cambridge University Press, 1957.